

REMARKS

This paper is responsive to the Final Office Action mailed July 15, 2011. Claims 1, 5-8, 11, 14-21 and 23-26 were pending before submission of this paper and were rejected. In this response, no amendments/cancellations are offered. Claims 1, 5-8, 11, 14-21 and 23-26 remain pending.

Reconsideration of the claims in view of the following remarks is respectfully requested.

Claim Rejections Under 35 U.S.C. § 102 over Kamizono

Claims 1, 5-7, 14, 15, 19, 23-26 were rejected under 35 U.S.C. 102(e) as allegedly being anticipated by U.S. Patent No. 6,697,054 to Kamizono ("Kamizono"). However, Kamizono does not teach each and every recitation of the claims. As such, the rejection of claims 1, 5-7, 14, 15, 19, 23-26 is improper and should be withdrawn.

Claims 1, 14, 19, and 26 are independent.

Claims 1, 5-7, and 23

Independent claim 1 recites, in part:

a keyboard upon said body including at least one key, the keyboard configured to cause a first function to be performed on activation of the key by physical contact with a terminating hand member of a user's right hand and to cause a second different function to be performed on activation of the key by physical contact with a terminating hand member of the user's left hand; and

a detection mechanism . . . configured to:

. . .
in response to detecting the one or more changes in physical contact, determine which one of the user's two hands will be used to activate the key; and

in response to the determining, assign one of the first function or the second function to the activation of the key.

[Emphasis added.]

In its rejection of the above-emphasized portions of claim 1, the Action cited to a passage of Kamizono which teaches alternating activation and inactivation of two separate sets of keys:

In the third embodiment of the present invention described herein before, it is controlled to validate or invalidate, the group of dedicated numeric input keys 7 or the group of dedicated cursor shift keys 8, respectively by the output of the sensor 1 L for left hand detection or the sensor 1 R for right hand detection; . . .

Besides, the only one sensor for left hand detection or right hand detection may be provided, and in can be controlled to validate or invalidate, the group of keys arranged this side of the sensor, making them correspond to this single key.

...
The second effect of the present invention is that keys can be arranged in a portion that is usually used as palm rest and where, conventionally, keys were not arranged in order to avoid miss input by accidental press by the hand, *because a key or a group of keys arranged in this side of the sensor is invalidated when a hand is in the proximity of the sensor.*

[Kamizono at column 7, lines 3-23; emphasis added.] As the passage clearly shows, Kamizono teaches using two separate sets of keys. These sets are illustrated as “dedicated numeric input keys 7” and “dedicated cursor shift keys 8” in Figure 7 of Kamizono. Kamizono further teaches activating or inactivating an entire set of these keys based on which hand is resting over the keys at a given time. The passage further confirms that entire sets of keys are activated or inactivated even if only one sensor is used. And regardless of whether one or two sensors are used, Kamizono clearly teaches inactivating a set of keys on the left (e.g. “dedicated numeric keys 7”) if the left hand is placed on the wrist rest area of the keyboard, and also inactivating a set of keys on the right (e.g. “dedicated cursor shift keys 8”) if the right hand is placed on the wrist rest area.

Kamizono’s inactivation of groups of keys clearly does not teach the above-emphasized recitations of claim 1. Kamizono teaches wholly separate sets of keys, each having a dedicated single function that is either activated or inactivated. Furthermore, Kamizono teaches that, for each of its keys, a determination of hand placement may only activate or inactivate that key’s single function.

As such, Kamizono does not teach “the keyboard configured to cause a first function to be performed on activation of the key by physical contact with a terminating hand member of a user’s right hand and to cause a second different function to be performed on activation of the key by physical contact with a terminating hand member of the user’s left hand,” as recited in claim 1, since Kamizono does not teach that a key may have two different

functions. And for similar reasons, Kamizono also does not teach “assign[ing] one of the first function or the second function to the activation of the key,” as recited in claim 1.

For at least these reasons, Kamizono fails to teach each and every recitation of claim 1. Claim 1 should therefore be allowable over Kamizono. Furthermore, claims 5-7 and 23 each depend from claim 1 and incorporate its recitations. Claims 5-7 and 23 should therefore be allowable as well. It is respectfully requested that the rejection of claims 1, 5-7 and 23 be withdrawn and the claims be allowed.

Claims 14 and 15

Independent claim 14 recites, in part:

[...] keyboard configured to cause a first function to be performed on activation of the key by physical contact with a terminating hand member of a user's right hand and to cause a different second function to be performed on activation of the key by physical contact with a terminating hand member of the user's left hand; and

at least one pressure sensor and associated logic, configured to:

...
in response to the determining, assign one of the first function or the second function to the activation of the key.

Claim 14 was rejected simultaneously with claim 1 over the same passages of Kamizono. Thus, for at least the reasons discussed above with respect to claim 1, claim 14 should be allowable over Kamizono. Furthermore, claim 15 depends from claim 14 and incorporates its recitations. Claim 15 should therefore be allowable as well. It is respectfully requested that the rejection of claims 14 and 15 be withdrawn and the claims be allowed.

Claims 19, 24, and 25

Independent claim 19, as amended, recites, in part:

In an electronic device comprising a keyboard having a plurality of input keys, including at least a keyboard configured to input a first character value on activation of the key by physical contact with a terminating hand member of a user's right hand and to input a second character value on activation of the key by physical contact with a terminating hand member of a user's left hand, a method comprising:

...

in response to the determining, assigning one of said first or second character value to the activation of the key if the activation of the key occurs within a pre-defined period of time since said determining.

The Action rejected the above-quoted recitations of claim 19 over the same passage of Kamizono discussed above with respect to claim 1. Thus, for at least the reasons discussed above, claim 19 should be allowable over Kamizono. Furthermore, claims 24 and 25 each depend from claim 19 and incorporate its recitations. Claims 24 and 25 should therefore be allowable as well. It is respectfully requested that the rejection of claims 19, 24, and 25 be withdrawn and the claims be allowed.

Claim 26

Independent claim 26 recites, in part:

a keyboard upon said body including at least one key, the keyboard configured to cause a first function to be performed on activation of the key by physical contact with a terminating hand member of a user's right hand and to cause a second different function to be performed on activation of the key by physical contact with a terminating hand member of the user's left hand; and

at least one touch-sensitive sensor and associated logic configured to:

...

in response to the determining, assign one of the first function or the second function to the activation of the key.

Claim 26 was rejected simultaneously with claim 1 over the same passages of Kamizono. Thus, for at least the reasons discussed above with respect to claim 1, claim 26 should be allowable over Kamizono. It is respectfully requested that the rejection of claim 26 be withdrawn and the claim be allowed.

Claim Rejections Under 35 U.S.C. § 102 over Williams

Claims 17-21 were rejected under 35 U.S.C. 102(e) as allegedly being anticipated by U.S. Patent No. 6,956,564 to Williams ("Williams"). However, Williams does not teach each and every recitation of the claims. As such, the rejection of claims 17-21 is improper and should be withdrawn. Claims 17 and 19 are independent.

Claims 17 and 18

Claim 17 recites, in part:

a keyboard upon said body including a key, *the keyboard configured to cause a first function to be performed on activation of the key by physical contact with a terminating hand member of a user's right hand and to cause a second function to be performed on activation of the key by physical contact with a terminating hand member of the user's left hand*, and
a motion sensor and associated logic, configured to:

...
in response to detecting the one or more movements, determine which one of the user's two hands will be used to activate the key. . . .

[Emphasis added.] In its rejection of the above-emphasized recitations of claim 17, the Action cited to a passage of Williams that teaches determining orientation of a device:

For the avoidance of doubt it is here noted that the microcontroller 30 includes a program which uses position outputs from the accelerometers 31, 32 *to determine from the orientation of the computer whether the hand-held computer is in the left hand or right hand of the user*. It is here noted that accelerometer output may depend upon the tilt angle of the included accelerometers to the earth's gravitational field. *The keys S1 to S8 are then swapped over in soft programming mode such that functionality is determined by the apparent top of the display 5 to the user in its current position. . . .*

[Williams, at column 4, line 63 to column 5, line 6.] As the passage shows, Williams teaches only the use of motion detection to determine the orientation of Williams' microcontroller. Further, even though the cited passage of Williams describes "determin[ing] whether the hand-held computer is in the left hand or the right hand of the user" it is clear that this determination is still merely a determination of the microcontroller's orientation. Indeed, Williams clearly teaches basing key functionality on which keys are oriented on top, rather than basing functionality on a hand used to activate the keys. For example, Williams' microcontroller would exhibit the same behavior in a given orientation, regardless of which hand was actually holding the microcontroller.

It is therefore respectfully noted that Williams does not teach a "keyboard configured to cause a first function to be performed on activation of the key by physical contact with a terminating hand member of a user's right hand and to cause a second function to be performed on activation of the key by physical contact with a terminating hand member of the user's left hand," as recited in claim 17, because Williams does not teach any

determination of which hand is activating any one key. Similarly, Williams also does not teach “determin[ing] which one of the user’s two hands will be used to activate the key,” as recited in claim 17.

For at least these reasons, Williams fails to teach each and every recitation of claim 17. Claim 17 should therefore be allowable over Williams.

Furthermore, claim 18 depends from claim 17 and incorporates its recitations. Claim 18 should therefore be allowable as well. Additionally, it is noted that the Action acknowledged that Williams does not explicitly teach the MEMS device recited in claim 18. While the Action appears to take Official Notice “that MEMS motion sensors are common in the art,” it is respectfully submitted that such a determination is not sufficient to show that Williams inherently teaches a MEMS device. As such, even with the official notice, the Action still fails to show that Williams teaches each and every recitation of claim 18.

It is respectfully requested that the rejection of claims 17 and 18 be withdrawn and the claims be allowed.

Claims 19-21

Independent claim 19, as amended, recites, in part:

In an electronic device comprising a keyboard having a plurality of input keys, including at least a keyboard configured to input a first character value on activation of the key by physical contact with a terminating hand member of a user’s right hand and to input a second character value on activation of the key by physical contact with a terminating hand member of a user’s left hand, a method comprising:

...
in response to detecting the one or more changes in physical contact,
determining which one of the user’s two hands will be used to activate the key
....

The Action rejected the above-quoted recitations of claim 19 over the same passage of Williams discussed above with respect to claim 17. Thus, for at least the reasons discussed above, claim 19 should be allowable over Williams. Furthermore, claims 20 and 21 each depend from claim 19 and incorporate its recitations. Claims 20 and 21 should therefore be allowable as well. It is respectfully requested that the rejection of claims 19-21 be withdrawn and the claims be allowed.

Claim Rejections Under 35 U.S.C. § 103

Claims 8, 11 and 16 were rejected under 35 U.S.C. 103(a) as allegedly being unpatentable over Kamizono in view of U.S Patent No. 6,888,532 to Wong (“Wong”).

Claims 8, 11, and 16 each depend from one of independent claims 1 and 14 and incorporate their respective recitations. For at least the reasons discussed above, Kamizono fails to teach or suggest each and every recitation of claims 1 and 14. Furthermore, no teaching is found in Wong which remedies this deficiency of Kamizono. Thus, Kamizono and Wong, taken either separately or in combination fail to teach or suggest each and every recitation of claims 1 and 14. Kamizono and Wong also therefore fail to teach or suggest each and every recitation of claims 8, 11, and 16.

The Action has failed to make a *prima facie* case of unpatentability of claims 8, 11, and 16. It is respectfully requested that the rejections of claims 8, 11, and 16 be withdrawn and the claims be allowed.

CONCLUSION

In view of the foregoing amendments and remarks, Applicants believe the applicable rejections have been overcome and all claims remaining in the application are presently in condition for allowance. Accordingly, favorable consideration and a Notice of Allowance are earnestly solicited. The Examiner is invited to telephone the undersigned representative at (206) 407-1577 if the Examiner believes that an interview might be useful for any reason.

It is not believed that extensions of time are required beyond those that may otherwise be provided for in documents accompanying this paper. However, if additional extensions of time are necessary to prevent abandonment of this application, then such extensions of time are hereby petitioned under 37 C.F.R. § 1.136(a). If any fees are due in connection with filing this paper, the Commissioner is authorized to charge the Deposit Account of Schwabe, Williamson and Wyatt, P.C., No. 50-0393.

Respectfully submitted,
SCHWABE, WILLIAMSON & WYATT, P.C.

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